



Connecticut Department of Energy and Environmental Protection



Connecticut Department of
**ENERGY &
ENVIRONMENTAL
PROTECTION**

2020 State Diesel Emissions Reduction Act (DERA) Grants

Webinar 10/8/20
DEEP Mobile Sources Group



Connecticut Department of Energy and Environmental Protection

Who We Are

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Agenda

- Background on Diesel Emissions Reduction Act (DERA)
- Connecticut State DERA Program
 - Program Summary & Benefits
- Distinctions from VW Program
- Funding
- Application & Selection
- Answers to Common Questions
- Contacting Us
- Q & A Period



DERA Background



Background & History

- Diesel Emissions Reduction Act was included in the Energy Policy Act of 2005
 - *PUBLIC LAW 109–58—AUG. 8, 2005*
- Annual Budget Allocation by Congress
- Establishes several types of clean diesel funding
 - State DERA: Non-competitive state allocations; state administered
 - National DERA: Regional projects, EPA-administered, focused on public entities (competitive)
 - Clean School Bus is a subset of National DERA (Nationwide lottery)
- 2008 First Year of Funding



State Program Goals & Restrictions

- Connecticut runs its program as a reimbursement program
- Designed to achieve significant reductions in diesel emissions.
- Restrictions
 - Funding limits set by EPA
 - No fleet expansion
 - Scrappage
 - Early Replacement no longer required
 - Limited Model Year Ranges



State Program Schedule

- Solicitation expected to open on October 14, 2020
 - Email Patrice.Kelly@ct.gov to be added to distribution list
- Up to \$767,000 Available from 2020 funds
 - EPA allocation
 - VW DERA Option funds as voluntary match
 - EPA Matching Incentive
- Submission Deadline six weeks after launch
- Decisions anticipated by the end of December



DERA v. VW Eligibility



DERA Eligible Projects

- Vehicle & Equipment Replacement (*includes vessels & locomotives*)
 - *EMY 1996 and newer*
 - *Class 5-8*
- Repower / Engine Replacement
- Engine Upgrades / Rebuilds
- Clean Alternative Fuel Conversions
- EPA-Verified Idle Reduction Technologies
- Exhaust Emission Control Technologies
- EPA-Verified Aerodynamic Technologies and Low Rolling Resistance Tires



VW Eligible Projects

- Vehicle & Equipment Replacement (~~vessels & locomotives~~)
 - *EMY 1992 – 2009*
 - *Class 4-8*
- Repower / Engine Replacement
- ~~Engine Upgrades / Rebuilds~~
- ~~Clean Alternative Fuel Conversions~~
- ~~EPA-Verified Idle Reduction Technologies~~
- ~~Exhaust Emission Control Technologies~~
- ~~EPA-Verified Aerodynamic Technologies and Low Rolling Resistance Tires~~
- EVSE in a separate program



DERA Eligible Projects Not Eligible for VW

- Replacement of EMY 2010 or newer vehicles with Zero-Emission or CARB Low-NOx vehicles
- Replacement or Repowering of Non-road Construction or Agricultural Equipment including
 - loaders and commercial mowers
 - transport refrigeration units (TRUs)
 - stationary generators
 - pumps
- Engine Upgrades (rebuids) of on-highway, non-road, marine or locomotive engines
- Clean Alternative Fuel Conversions (*includes EMY 2010 or newer vehicles*)



DERA Eligible Projects Not Eligible for VW

- Replacement or repowering for long haul locomotives
 - *VW funding is limited to freight switchers*
- Replacement or repowering of commercial vessels
 - *marine engine funding under the VW Program is limited to tugboats and ferries*
- Idle reduction technologies, including
 - auxiliary power units on long haul trucks and school buses
 - truck stop electrification
 - idle reduction for locomotives
 - shorepower for TRUs
- Emission control technologies for diesel vehicles or equipment.



Swapping Option Under DERA

A 2010 EMY or newer vehicle may be replaced with a diesel equivalent if it will replace a 1996-2009 EMY diesel vehicle that is scrapped. *(Requires EPA approval)*

Example:

- Town A wants a new maintenance truck but doesn't have an eligible truck (EMY 1996-2009) to scrap
- Nearby Town B has several eligible maintenance trucks in its fleet and would like to acquire a good used truck to replace one of them.
- Town A proposes to sell one of its newer trucks, EMY 2010 or newer, to Town B, and replace it with a new truck under a DERA grant; in return, Town B agrees to scrap one of its eligible trucks.

Condition: New vehicles/engines must continue to operate in the same area where the replaced vehicles/engines operated.



Additional DERA Benefit

Less Competition for DERA Funds

- 20 proposals submitted for 2019 State DERA grants
 - Ten of which were rollovers of unsuccessful VW Round 2 applications
 - Seven rollovers received DERA funding
- 27 proposals submitted for Round 2 of VW funding in 2019



Restrictions

DERA Projects are limited to Class 5-8 Vehicles

- VW covers Class 4-8 vehicles

Projects initiated prior to filing an application for the program are not eligible for funding

- Submission of an application is not a guarantee that a proposed project will be funded
- Project initiation activities that can disqualify an application include
 - initiating an RFP
 - selecting a Vendor
 - ordering vehicles, equipment, or engine
 - hiring a contractor



Restrictions

New vehicles/engines must continue to operate in the same area where the replaced vehicles/engines operated.

Hypothetical 1:

- Town A wants new school buses but it's fleet is too new to be eligible
- Town A's school bus provider has older, eligible buses assigned to Town B, which is an Environmental Justice (EJ) community
- Provider proposes scrapping the eligible buses in Town B, moving newer, but not new buses from Town A to Town B, and giving the new buses, purchased under the grant to Town A

This is not generally allowed under either the DERA or VW programs.



Restrictions

New vehicles/engines must continue to operate in the same area where the replaced vehicles/engines operated.

Hypothetical 2:

- Town A wants an electric school bus but cannot afford to purchase one at the 45% DERA rate
- Nearby Town B has older, eligible school buses
- Town A proposes selling a newer bus (MY 2010 or newer) to Town B and purchasing the EV bus with the combined proceeds from the sale and the 45% grant; Town B agrees to scrap an eligible bus.

This is allowed under the DERA program

- Requires DEEP to obtain prior approval from EPA



DERA Reimbursement



DERA Reimbursement

Reimbursement for Vehicle Replacement up to

- 25% of the cost for replacement of Class 5-8 highway diesel trucks and buses with 2016 EMY or newer vehicles
- 50% of the cost for replacement of drayage trucks with 2013 EMY or newer trucks
- 25% of the cost for replacement of locomotives, marine vessels, and non-road vehicles and equipment with 2019 EMY or newer equivalents
- 35% of the cost for replacement with 2016 EMY or newer on-highway vehicles powered by engines certified to meet CARB's Optional Low-NO_x Standards of 0.1 g/bhp-hr, 0.05 g/bhp-hr, or 0.02 g/bhp-hr NO_x
- 45% of the cost for replacement with electric equivalents



DERA Reimbursement

Reimbursement for Engine Replacement (Repower) up to

- 40% of the cost for replacement diesel engines in a highway vehicles with 2016 EMY or newer engines certified to EPA emission standards
- 40% of the cost for replacement of diesel engines on locomotives, marine vessels, and non-road vehicles and equipment with 2019 EMY or newer equivalents
- 50% of the cost for replacement with 2016 EMY or newer engines certified to meet CARB's Optional Low-NO_x Standards of 0.1 g/bhp-hr, 0.05 g/bhp-hr, or 0.02 g/bhp-hr NO_x
- 60% of the cost for replacement with electric engines



DERA Reimbursement

Reimbursement for Engine Upgrades (Rebuilds): up to 40% of the cost using kits that are verified or certified by EPA or the California Air Resources Board (CARB)

Reimbursement for Clean Alternative Fuel Conversions: up to 40% of the cost for aftermarket alternative fuel conversion systems. These must be certified by either CARB or EPA and otherwise eligible for sale in Connecticut

Reimbursement for Emission Control Technologies (Retrofits): up to 100% of the cost for retrofit technologies for emission control that are certified or verified by EPA or CARB.



DERA Reimbursement

Reimbursement for Idle Reduction Projects:

Stationary Technologies: up to

- 30% of the cost for shore connections for electrified parking spaces, hybrid electric transport refrigeration units or electrified truck stops
- 25% of the cost for eligible marine shorepower systems to allow maritime vessels to “plug into” an electrical power source instead of using diesel main or auxiliary engines while at port



DERA Reimbursement

Reimbursement for Idle Reduction Projects 2:

Stationary & On-Board Technologies: up to

- 40% of the cost for locomotive idle reduction, stationary and on-board
- 25% of the cost for highway idle reduction technologies for long-haul trucks and school buses (includes Auxiliary Power Units (APUs)); up to 100% if combined with retrofit technologies.

EPA-Certified Aerodynamic Technologies and Low Rolling Resistance Tires:


- Up to 100% of the cost for aerodynamic technologies and low rolling resistance tires on long-haul, Class 8 trucks but only if combined with verified exhaust emission controls.



Application & Selection



Application Form



Connecticut
Department of Energy and Environmental Protection

“DEEP is continuing to carry out its mission and provide services while keeping both the public and our workforce safe during the COVID-19 pandemic. Click here for the latest updates on DEEP's response to COVID-19. [DEEP COVID-19 Response](#)”

CT.gov Home / Department of Energy and Environmental Protection / Air / DERA Grants

VW Settlement >
CHEAPR >
DERA Grants >
EVConnecticut >
Emissions Testing >
Anti-Idling >

Diesel Emissions Reduction Act Grants

The Diesel Emission Reduction Act (DERA), contained within the Energy Policy Act of 2005, provides grants and loans to states and other eligible entities to achieve significant reductions in diesel emissions. DEEP receives funds from EPA through the State DERA Program. From time to time, project proposals have been solicited from municipalities, organizations, and individuals for projects that are environmentally and economically beneficial.

Current DERA and Diesel Related Funding Opportunities

To the extent resources are available, DEEP can provide assistance to entities and individuals seeking to apply for

- Application form and instructions will be available at <https://portal.ct.gov/DEEP/Air/Mobile-Sources/DERA-Grants>
- If applying for funds for more than one source category (i.e. on-road vehicles and non-road equipment), a separate application should be used for each eligible source category project



Part I – Applicant Information

- Basic contact information
- Important to have an accurate and working e-mail address.

Part 1: Applicant Information

| | | | |
|---|----------------------|----------------------|---|
| Applicant/Organization Name: | | <input type="text"/> | |
| Address: | | <input type="text"/> | |
| City: | <input type="text"/> | State: | <input type="text"/> |
| | | Zip Code: | <input type="text"/> |
| Authorized Representative Name:¹ | | <input type="text"/> | |
| Authorized Representative Title: | | <input type="text"/> | |
| E-Mail: | <input type="text"/> | Telephone: | <input type="text"/> |
| Additional Contact Name: (Optional)² | | <input type="text"/> | |
| E-Mail: | <input type="text"/> | Telephone: | <input type="text"/> |
| Additional Contact Name: (Optional) | | <input type="text"/> | |
| E-Mail: | <input type="text"/> | Telephone: | <input type="text"/> |
| Have you previously submitted a proposal to DEEP for clean diesel or EV charger funding? | | | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Are you submitting additional proposals for this incentive program? If so, how many? | | | <input type="checkbox"/> Yes: <input type="text"/> <input type="checkbox"/> No |



Part II.A – Project Summary

- Provide a project title and anticipated project start and end dates.
- All projects must have potential for completion by August 31, 2021.
- Provide a detailed but concise description of the proposed project, including community and air quality benefits.
- Include information on use of old vehicles and areas where they operate.
- **Important!!** This is your opportunity to promote the energy, environmental and economic benefits of the project.

| A. Project Summary: | | | |
|--|--|--|--|
| Proposed Project Title: | | | |
| <input type="text"/> | | | |
| Project Summary: Please describe briefly the proposed project. Provide information on the vehicle/engine to be replaced/upgraded in this proposed project, how they are used and where they operate. You may add more lines if necessary. | | | |
| <input type="text"/> | | | |
| Duration of Project Requested: | | Project Start Date: | |
| <input type="text"/> Months | | <input type="text"/> | |
| | | Project End Date: <i>(no later than 8/31/21)</i> | |
| | | <input type="text"/> | |



Part II.B – Project Category

- Indicate the project category being applied for.
- If more than one category, then a separate application form should be used for each project category.
 - **Exception for Aerodynamic Technologies**, which can only be funded in conjunction with Emissions Control Technologies (retrofits), and
 - **Exception for Highway Idle Reduction** technologies, which have higher reimbursement in combination with retrofits

| B. Project Category: | |
|---|--------------------------|
| Project Categories Potentially Available for Funding | |
| Replacement: Reimbursement for replacement with diesel vehicles or nonroad equipment can be made up to | |
| • 25% of the cost for replacement of Class 5-8 highway diesel trucks and buses with 2016 engine model year (EMY) or newer equivalents, | <input type="checkbox"/> |
| • 50% of the cost for replacement of drayage trucks with 2013 EMY or newer trucks, | <input type="checkbox"/> |
| • 25% of the cost for replacement of locomotives, marine vessels, and non-road vehicles and equipment with 2019 EMY or newer equivalents, | <input type="checkbox"/> |
| • 35% of the cost for replacement with 2016 EMY or newer on-highway vehicles powered by engines certified to meet CARB's Optional Low-NO _x Standards of 0.1 g/bhp-hr, 0.05 g/bhp-hr, or 0.02 g/bhp-hr NO _x , and | <input type="checkbox"/> |
| • 45% of the cost for replacement with electric vehicles or equipment. | <input type="checkbox"/> |
| Repower: Reimbursement for replacement of diesel engines can be made up to | |
| • 40% of the cost for replacement diesel engines in a highway vehicles with 2016 EMY or newer engines certified to EPA emission standards, | <input type="checkbox"/> |
| • 40% of the cost for replacement of diesel engines on locomotives, marine vessels, and non-road vehicles and equipment with 2019 EMY or newer equivalents, | <input type="checkbox"/> |
| • 50% of the cost for replacement with 2016 EMY or newer engines certified to meet CARB's Optional Low-NO _x Standards of 0.1 g/bhp-hr, 0.05 g/bhp-hr, or 0.02 g/bhp-hr NO _x , and | <input type="checkbox"/> |
| • 60% of the cost for replacement with electric engines. | <input type="checkbox"/> |
| Engine Upgrades: 40% of the cost for engine upgrades using kits that are verified or certified by EPA or the California Air Resources Board (CARB). | <input type="checkbox"/> |
| Clean Alternative Fuel Conversions: 40% of the cost for aftermarket alternative fuel conversion systems. These must be certified by either CARB or EPA for the specific vehicle or engine family that is being converted; the vehicle being converted must be CARB or 50-state certified and is otherwise eligible for sale in Connecticut. | <input type="checkbox"/> |
| Emission Control Technologies: 100% of the cost for retrofit technologies for emission control that are certified or verified by EPA or the CARB. Eligible retrofit costs include, but are not limited to, DPF cleaning machines, spare DPFs for maintenance rotation, replacement CCV filters, mechanic training, and filter cleaning contracts. | <input type="checkbox"/> |
| Idle reduction technologies that are verified by the U.S. Environmental Protection Agency (EPA): | |
| • Stationary Technologies: | |
| o 30% of the cost for shore connections for electrified parking spaces, hybrid electric transport refrigeration units or electrified truck stops; and | <input type="checkbox"/> |
| o 25% of the cost (labor and equipment) for eligible marine shorepower systems to allow maritime vessels to "plug into" an electrical power source instead of using diesel main or auxiliary engines while at port, including the cost of modifications, attachments, accessories, or auxiliary apparatus necessary to make the equipment functional. | <input type="checkbox"/> |
| • 40% of the cost for locomotive idle reduction, stationary and on-board. | <input type="checkbox"/> |



Part III.A –Replacement, Repower, Engine Upgrade & Clean Alternative Fuel Conversions

- Provide number of vehicles being replaced/repowered.
- Submit all required supporting documentation.
- Part VII: Fleet Information Worksheet collects information about the old vehicles and replacements. (Will be discussed in detail later)
- **Important!!** Ensure all estimates and spec sheets are attached to application form and are legible.

| A. Replacement, Repower, Engine Upgrade and Clean Alternative Fuel Conversions: | | |
|---|--------------------------|-----|
| Vehicle Category | Applicable | QTY |
| On-Road Vehicles | <input type="checkbox"/> | |
| Drayage Trucks | <input type="checkbox"/> | |
| Non-Road Equipment | <input type="checkbox"/> | |
| Commercial Marine (see A.1) | <input type="checkbox"/> | |
| Locomotives (See A.2) | <input type="checkbox"/> | |

| | |
|--|--------------------------|
| For All Replacement, Repower, Engine Upgrade or Clean Alternative Fuel Conversion Projects: Submit Completed Part VII: Fleet Information | <input type="checkbox"/> |
| Replacement of a 2010 EMY or Newer Highway Vehicle with Scrappage of a 1996-2009 EMY Vehicle: Applicant must submit a detailed scrappage plan. (DEEP must submit the plan to EPA for approval prior to funding.) | <input type="checkbox"/> |
| Drayage Truck: Applicant must provide evidence that any existing truck replaced with grant funds has a history of operating on a frequent basis over the prior year as a drayage truck. If selected, the grantee will be required to establish guidelines to ensure any new truck purchased with grant funds is operated in a manner consistent with the definition of a drayage truck | <input type="checkbox"/> |
| Nonroad Equipment: | |
| <ul style="list-style-type: none">Agricultural Pumps: Applicant must provide evidence that agricultural pumps being replaced have operated at least 250 hours in the year preceding the application | <input type="checkbox"/> |
| <ul style="list-style-type: none">All Other Nonroad Equipment (equipment or vehicles used in construction, handling of cargo (including at a port or airport), agriculture, mining or energy production (including stationary generators): Applicants must provide evidence that equipment has operated at least 500 hours in the year preceding this application. | <input type="checkbox"/> |
| <ul style="list-style-type: none">Stationary Engines: Applications which include stationary engines must provide a clear and concise justification for why/how the proposed emissions reduction is not subject to the Restriction for Mandated Measures.³ | <input type="checkbox"/> |
| EPA Verified Engine Upgrades: Upgrade technologies for any eligible engines must be on one of EPA's list of eligible technologies. ⁴ Applicants must provide evidence that the chosen technology is EPA Verified. | <input type="checkbox"/> |
| Clean Alternative Fuel Conversions: Eligible conversions are limited to those systems that have been certified by EPA and/or CARB, and those systems that have been approved by EPA for Intermediate-Age engines. ⁵ | |
| <ul style="list-style-type: none">EPA or CARB Certified: Applicants must provide evidence that the chosen technology is EPA or CARB certified. | <input type="checkbox"/> |
| <ul style="list-style-type: none">Eligible for Sale in Connecticut: Applicants must provide evidence that the converted vehicle would be eligible for sale in Connecticut. | <input type="checkbox"/> |



Part III.A.1 – Commercial Marine Vessels

- Select the type of replacement/repower
- Provide number of vessels being replaced, repowered or upgraded and number of propulsion engines and auxiliary engines being replaced/repowered
- Submit all required supporting documentation.
- **Important!!** Provide documentation that vessels have been operating 1,000 or more hours in 12 months preceding application. (e.g. operating log)

A.1. Replacement, Repower or Engine Upgrade for Marine Vessels:

Indicate the quantity of marine vessels or engines being replaced, repowered or upgraded.⁶

| Vehicle Category | Number of Vessels | Number of Propulsion Engines | Number of Auxiliary Engines |
|---------------------|----------------------|------------------------------|-----------------------------|
| Marine Replacements | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Marine Repowers | | <input type="text"/> | <input type="text"/> |
| Engine Upgrades | | <input type="text"/> | <input type="text"/> |

Submit the following supporting documentation for the Marine Replacement/Repower Project:

| | |
|--|--------------------------|
| Applicant must provide evidence that engines have operated at least 1,000 hours in the year preceding this application. (<i>Engine hours may be combined to reach the 1000-hour threshold where two engines will be scrapped and replaced with a single engine.</i>) | <input type="checkbox"/> |
| Completed Part VII: Fleet Information | <input type="checkbox"/> |
| EPA Verified Engine Upgrades: Upgrade technologies for any eligible engines must be on one of EPA's list of eligible technologies. ⁷ Applicants must provide evidence that the chosen technology is EPA Verified. | <input type="checkbox"/> |



Part III.A.2 – Locomotives

- Provide number of locomotives and number of propulsion engines & generator sets being replaced/repowered
- Only pre Tier-4 locomotives are eligible
- Select the type of replacement/repower
- Submit all required supporting documentation.
- **Important!!** Provide documentation that locomotive has been operating 1,000 or more hours in 12 months preceding application. (e.g. operating log)

A.2. Replacement or Repower of Locomotives:

Indicate the quantity of locomotives and engines being replaced/repowered or upgraded.

| Vehicle Category | Number of Locomotives | Number of Propulsion Engines | Number of Generator Sets |
|-------------------------|-----------------------|------------------------------|--------------------------|
| Locomotive Replacements | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Locomotive Repowers | | <input type="text"/> | <input type="text"/> |
| Engine upgrades | | <input type="text"/> | |

Type of Replacement/Repower:

| | |
|--|--------------------------|
| Locomotive is being <u>repowered</u> with a new diesel or alternate fueled or all-electric engines (including generator sets) | <input type="checkbox"/> |
| Locomotive is being <u>replaced</u> with a new diesel or alternate fueled or <u>all-electric</u> (including generator sets) locomotive that is certified to meet the applicable EPA emissions standards. | <input type="checkbox"/> |

Submit the following supporting documentation for the Locomotives Category:

| | |
|---|--------------------------|
| Provide documentation that the locomotive has been operating 1,000 or more hours in the twelve months preceding this application. | <input type="checkbox"/> |
| Completed Part VII: Fleet Information | <input type="checkbox"/> |
| Upgrade technologies for any eligible engines must be on one of EPA's list of eligible technologies. Applicants must provide evidence that the chosen technology is EPA Verified. | <input type="checkbox"/> |



Part III.B – Emission Control Technologies

- Emission Control Technologies, a.k.a. retrofits can be fully covered
- Retrofits include
 - diesel oxidation catalysts (DOCs)
 - diesel particulate filters (DPFs)
 - systems that include closed crankcase ventilation (CCV) filtration systems.
- Indicate if technology is EPA or CARB certified.
- Submit all required supporting documentation.

B. Emission Control Technologies:

Diesel engine retrofits are one of the most cost-effective solutions for reducing diesel engine emissions. Retrofits include pollution control devices installed in the exhaust system, such as diesel oxidation catalysts (DOCs) and diesel particulate filters (DPFs), or systems that include closed crankcase ventilation (CCV) filtration systems.



| | |
|--|--------------------------|
| For All Diesel Emission Control Technologies: Applicants must provide evidence that the chosen technology is EPA or CARB certified. | <input type="checkbox"/> |
| Completed Part VII: Fleet Information | <input type="checkbox"/> |



Part III.C – Idle Reduction Technologies

- **Idle reduction technologies:**
 - reduce unnecessary idling of diesel vehicles or equipment
 - and/or provide services (such as heat, air conditioning, and/or electricity) while the vehicle is temporarily parked or stationary.
- **Technology categories include:**
 - auxiliary power units (APUs) and generator sets,
 - battery air conditioning systems,
 - thermal storage systems,
 - electrified parking spaces (truck stop electrification),
 - fuel-operated heaters,
 - shore connection systems for locomotives, and
 - automatic shutdown/start-up systems for locomotives



Part III.C.1 – Stationary Idle Reduction Technologies

- Provide address of proposed installation.
- Indicate if system will comply with international standards.
- Submit all required supporting documentation.
- **Important!!** Provide documentation demonstrating that applicant has site control of proposed infrastructure site.

C.1. Stationary Idle Reduction Technologies

C.1.a. Marine Shorepower Systems:

May include cables, cable management systems, shore power coupler systems, distribution control systems, and power distribution.

| | |
|---|--------------------------|
| Address of Proposed Installation: <i>Provide name of facility, street address, street intersection and/or latitude/longitude and city</i> | <div></div> |
| Marine shore power system will comply with international shore power design standards (ISO/IEC/IEEE 80005-1-2012 High Voltage Shore Connection Systems or the IEC/PAS 80005-3:2014 Low Voltage Shore Connection Systems) and will be supplied with power sourced from the local utility grid. | <input type="checkbox"/> |

Submit the following supporting documentation for the Marine Shorepower Proposal:

| | |
|--|--------------------------|
| Provide documentation demonstrating that applicant has site control ⁹ over the proposed infrastructure site. | <input type="checkbox"/> |
| Demonstrate that the proposed system has the capacity, demand, and commitment to be <u>utilized</u> for more than 1,000 MW-hours per year. | <input type="checkbox"/> |
| If the project application is <u>selected</u> for funding, submit the final design of the marine shore power connection system for EPA approval prior to purchase and installation. (<i>Requirements for the final design will be provided.</i>) | <input type="checkbox"/> |



Part III.C.1 – Stationary Idle Reduction Technologies

C.1.a. Marine Shorepower Systems:

- Provide address of proposed installation.
- Indicate that the system will comply with international standards.
- Submit all required supporting documentation
- **Important!!** Provide documentation demonstrating that applicant has site control of proposed infrastructure site.

C.1. Stationary Idle Reduction Technologies
C.1.a. Marine Shorepower Systems:
May include cables, cable management systems, shore power coupler systems, distribution control systems, and power distribution.

| | |
|---|--------------------------|
| Address of Proposed Installation: <i>Provide name of facility, street address, street intersection and/or latitude/longitude and city</i> | <div></div> |
| Marine shore power system will comply with international shore power design standards (ISO/IEC/IEEE 80005-1-2012 High Voltage Shore Connection Systems or the IEC/PAS 80005-3:2014 Low Voltage Shore Connection Systems) and will be supplied with power sourced from the local utility grid. | <input type="checkbox"/> |

Submit the following supporting documentation for the Marine Shorepower Proposal:

| | |
|---|--------------------------|
| Provide documentation demonstrating that applicant has site control ⁹ over the proposed infrastructure site. | <input type="checkbox"/> |
| Demonstrate that the proposed system has the capacity, demand, and commitment to be utilized for more than 1,000 MW-hours per year. | <input type="checkbox"/> |
| If the project application is selected for funding, submit the final design of the marine shore power connection system for EPA approval prior to purchase and installation. (<i>Requirements for the final design will be provided.</i>) | <input type="checkbox"/> |



Part III.C.1 – Stationary Idle Reduction Technologies

C.1.b. Electrified Parking Spaces (EPS), a.k.a. Truck Stop Electrification:

- Includes Transport Refrigeration Units (TRUs) with shorepower infrastructure

C.1.b. Electrified Parking Spaces (EPS):

| | | |
|--|--|--------------------------|
| Address of Proposed Installation: <i>Provide name of facility, street address, street intersection and/or latitude/longitude and city</i> | | <input type="text"/> |
| Number of <u>shorepower</u> units to be installed | | <input type="text"/> |
| Submit the following supporting documentation for the Electrified Parking Spaces Category: | | |
| Provide documentation demonstrating that applicant has site control over the proposed infrastructure site. | | <input type="checkbox"/> |

- Provide address of proposed installation.
- Submit all required supporting documentation
- **Important!!** Provide documentation demonstrating that applicant has site control of proposed infrastructure site.



C.3.a: Locomotive Shorepower Systems:

- Provide address of proposed installation.
- Indicate that system has the required capacity for >1,000 MW-hours per year.
- Submit all required supporting documentation
- **Important!!** Provide documentation demonstrating that applicant has site control of proposed infrastructure site.

C.3. Idle Reduction Systems for Locomotives

C.3.a. Locomotive Shorepower Systems

+

Address of Proposed Installation:
Provide name of facility, street address, street intersection and/or latitude/longitude and city

Submit the following supporting documentation for the Locomotive Shorepower Proposal:

| | |
|--|--------------------------|
| Provide documentation demonstrating that applicant has site control over the proposed infrastructure site. | <input type="checkbox"/> |
| Demonstrate that the proposed system has the capacity, demand, and commitment to <u>be utilized</u> for more than 1,000 MW-hours per year. | <input type="checkbox"/> |



Part III.C.3 – Locomotive Idle Reduction Technologies

C.3.b: Automatic Shutdown/Start-up Systems for Locomotives.

- Indicate that system is on EPA’s list of eligible technologies
- Submit all required supporting documentation
- **Important!!** Provide documentation that locomotive has been operating 1,000 or more hours in 12 months preceding application. (e.g. operating log)

C.3. Idle Reduction Systems for Locomotives

C.3.b Automatic Shutdown/Start-up Systems for Locomotives.

Submit the following supporting documentation for each locomotive:

| | |
|---|--------------------------|
| Provide documentation that the locomotive has been operating 1,000 or more hours in the twelve months preceding this application. | <input type="checkbox"/> |
| Upgrade technologies for any eligible engines must be on one of EPA’s list of eligible technologies. Applicants must provide evidence that the chosen technology is EPA Verified. | <input type="checkbox"/> |
| Completed Part VII: Fleet Information | <input type="checkbox"/> |



Part III.D – Aerodynamic Technologies

EPA-Certified Aerodynamic Technologies and Low Rolling Resistance Tires:

- EPA will not fund stand-alone aerodynamic technologies or low rolling resistance tires. However, aerodynamic technologies, can be fully covered, if combined on the same vehicle with the new installation of one or more of the Verified Engine Retrofit Technologies.
- Indicate that the technology is EPA or CARB certified.
- Submit all required supporting documentation.

D. EPA-Certified Aerodynamic Technologies and Low Rolling Resistance Tires:

|

| | |
|---|--------------------------|
| For All Aerodynamic Technology Projects: | |
| <ul style="list-style-type: none">• Applicants must provide evidence that the chosen technology is EPA or CARB certified. | <input type="checkbox"/> |
| <ul style="list-style-type: none">• Applicants must include the installation of certified emissions control technology in the proposed project. | <input type="checkbox"/> |



Part III.E – EV Charging Infrastructure

- Complete **only** if replacement vehicles are electric and also installing associated charging infrastructure
- Indicate charger type, brand, model, number of chargers and number of outlets for the project.

E. EV Charging Infrastructure:

Complete **only** if you are replacing vehicles or equipment with an electric equivalent **and** installing associated charging infrastructure. |

| Number of EV Charging Stations to be Installed? | | | | |
|---|-------|-------|--------------------|--------------------------|
| Type | Brand | Model | Number of Chargers | Number of Outlets |
| Level 1 | | | | |
| Level 2 | | | | |
| DC Fast Charger | | | | |
| Address of Proposed Installation <i>Provide name of facility, street address, street intersection and/or latitude/longitude and city</i> | | | | |
| Attach all specification sheets for equipment for the EV charging infrastructure. | | | | <input type="checkbox"/> |
| Attach all estimates for equipment, site preparation, installation and labor for the EV charging infrastructure. | | | | <input type="checkbox"/> |

- **Important!!** Applicants must have site control of installation site and documentation should be submitted.



Part IV.A – Proposed Budget: Project Costs

- Provide number of new vehicles/engines/equipment being purchased with make, model and year of each.
- Group similar units if possible.
- **Important!!** Provide values and totals for every applicable line.
- Ensure all cost estimates and spec sheets are included with submittal to enable verification of values entered on this sheet.

Part IV. Proposed Budget: Please provide a list of the expenses for the proposed project. You may add line items as needed. Attach additional sheets if more line items are required than the space allotted below.

A. Project Costs

| New Vehicle/Equipment/Engine Description | | | | | Cost |
|---|---|------|-------|------|------|
| Number of replacements vehicles/engines /equipment | Equipment Type (e.g. Frontloader, refuse truck) | Make | Model | Year | |
| | | | | | |
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| Drayage truck maintenance (labor & materials) if applicable and requested ¹⁰ | | | | | |
| Installation Cost of Vehicle, Equipment and Engine (labor & materials) | | | | | |
| Total Cost of Vehicle, Equipment, Engine: | | | | | |
| EV Charging Infrastructure – Complete only if you are replacing with an electric Vehicle <u>and</u> installing associated charging infrastructure. | | | | | |
| Cost of Charging Station(s) listed in Part III E of this form | | | | | |
| Site Preparation Costs for EV Charging Station(s) (labor & materials) | | | | | |
| Installation Costs of EV Charging Station(s) (labor & materials) | | | | | |
| Other (please specify) <input type="text"/> | | | | | |
| Total EV Infrastructure Cost: | | | | | |
| Project Total Cost (Total Cost of Vehicle, Equipment, Engine + EV Infrastructure Cost) | | | | | |
| Anticipated Grant Award <input type="text"/> | | | | | |
| Grantee Cost Share <input type="text"/> | | | | | |



Part IV.A – Proposed Budget Shorepower

| | |
|---|--|
| EV Charging Infrastructure – Complete only if you are replacing with an electric Vehicle <u>and</u> installing associated charging infrastructure. | |
| Cost of Charging Station(s) listed in Part III E of this form | |
| Site Preparation Costs for EV Charging Station(s) (labor & materials) | |
| Installation Costs of EV Charging Station(s) (labor & materials) | |
| Other (please specify) <input type="text"/> | |
| Total EV Infrastructure Cost: | |

- Provide the number of units along with brand and model.
- Enter all costs including site prep, installation, and other associated costs.
- It is not unusual for site prep and installation costs to exceed cost of the actual shorepower equipment.
- Ensure all estimates and spec sheets are attached to application form.



Part IV.A – Proposed Budget Replacement/Repowers

| | | |
|---|--|--|
| Total EV Infrastructure Cost | | |
| Project Total Cost (Total Cost of Vehicle, Equipment, Engine + EV Infrastructure Cost) | | |
| Anticipated Grant Award | | |
| Grantee Cost Share | | |

- **Anticipated DERA Grant Award** should not exceed the program’s maximum reimbursement percentage each type of project.
 - **Example:** Replacement of municipal owned dump truck would be eligible for a maximum of 25% of “Project Total Cost” entered in the cell above.
 - **Grantee Cost Share** is the difference between the anticipated award and the project total.



Part IV.B – Balance of Funds

- Maximum funding is not guaranteed under this program.
- Applicant must attest that funds can be secured for project.
- Sources of funds and timeline to obtain funds must be provided.
 - For gov't projects, budget approval process date is important
- Indicate if the transaction will be a purchase or lease.

B. Balance of Funds

Maximum funding is not guaranteed. Be aware that funding is not guaranteed before awards are made. Note that this is a reimbursement program; applicant is responsible for all project costs prior to reimbursement.

| | |
|--|--|
| Applicant attests they can secure the funds for replacement of vehicles, equipment or engines and for operation and maintenance. | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| What is the source of these funds? | <input type="text"/> |
| What is the timeline for securing these funds? (For government projects: Budget approval process date) | <input type="text"/> |
| How will the vehicle, equipment or engine be procured? | <input type="checkbox"/> Purchased <input type="checkbox"/> Leased for a minimum of 3 years |



Part V –Evaluation Criteria

- Projects will be ranked based on a set of criteria reflecting funding priorities for the program.
- This is a list of preferential funding criteria and not eligibility criteria
- Check all that apply.
- **Important!!** Include required supporting information for each item.

| Ranking Criteria: Please check those that apply | |
|--|--|
| Is your project located in or does the vehicle operate in one the following counties: Fairfield, New Haven or Middlesex? | <input type="checkbox"/> Fairfield <input type="checkbox"/> New Haven <input type="checkbox"/> Middlesex |
| <input type="checkbox"/> | |
| Vehicle(s) will operate primarily in a listed environmental justice (EJ) community. ¹¹ . <i>If checked please identify the community and confirm that the project vehicles, current and replacements, will spend a significant amount of time operating in the identified area.</i> | <input type="checkbox"/> |
| <input type="checkbox"/> | |
| Project is near transportation hubs or corridors. <i>If checked, please describe below.</i> | <input type="checkbox"/> |
| <input type="checkbox"/> | |
| Project is in an area that receives a disproportionate quantity of air pollution from diesel fleets, including ports, rail yards, terminals, construction sites, school bus depots/yards, and distribution centers. <i>If checked, please describe below.</i> | <input type="checkbox"/> |
| <input type="checkbox"/> | |
| Applicant has, or project includes, a motor-vehicle anti-idling education and outreach program. <i>If checked, please summarize plan and submit documentation proving existence of an anti-idling program.</i> | <input type="checkbox"/> |
| <input type="checkbox"/> | |
| Project is consistent with the transportation section of the 2018 Comprehensive Energy Strategy for Connecticut ¹² and the State's EV Roadmap. ¹³ <i>If checked, please identify elements of the project that are consistent with these initiatives.</i> | <input type="checkbox"/> |
| <input type="checkbox"/> | |



Part V: Evaluation Criteria

- Projects located in the NY-NJ-CT nonattainment area
 - Please indicate if project is located in one of the NY-NJ-CT non-attainment area counties listed.
- Vehicle(s) will operate primarily in a listed Environmental Justice (EJ) Community
 - If checked please identify the community and confirm that the project vehicles, current and replacements, will spend a significant amount of time operating in the identified area.
 - For any criteria referencing location, please use the geographical area in which the vehicle/equipment operates; this may be different from the business address
- Projects located near transportation hubs or corridors



Part V: Evaluation Criteria

- Project is in an area that has borne a disproportionate share of the adverse impacts of air pollution from diesel fleets, including ports, rail yards, terminals, construction sites, school bus depots/yards, and distribution centers.
- Applicant has, or project includes, a motor-vehicle anti-idling education and outreach program.
 - If checked, please summarize plan and submit documentation proving existence of an anti-idling program.
- Project is consistent with the transportation section of the [2018 Comprehensive Energy Strategy](#) for Connecticut and the [State's EV Roadmap](#).



Part VI – Terms & Conditions, Submission

- Applicant attests that information is true and correct.
- If determined that grant funds were awarded based on false statements, funds would have to returned.
- Reiterates understanding of the key points of the reimbursement program.
- Submit application to address specified.
- **Important!!** Sign and date form!

| Part VI: Terms & Conditions | | | |
|--|--|--|------|
| Applicant is aware of the reimbursement options within EPA's 2020 State DERA Program Guide ¹⁴ | | | |
| Non-Government Vehicle/Equipment Owners must enter into a contract with the State of Connecticut and comply with state and federal contracting requirements. | | | |
| Vehicle/Equipment Owners must agree to keep the replacement, repowered or retrofitted vehicle or equipment operational in Connecticut, with emission controls in place, for a minimum of three years or to replace with equipment with equal or better emissions reductions. | | | |
| If the proposal includes the replacement of a vehicle or engine, Vehicle/Equipment Owners must provide documentation that the old vehicle or engine <u>has been rendered</u> permanently disabled before funds are released for final payment. | | | |
| If the proposal is for the replacement of a 2010 EMY with scrappage of a 1996-2000 EMY vehicle, applicant must provide a scrappage plan for EPA approval. ¹⁵ | | | |
| If the proposal is for a project requiring a mandatory cost share (i.e. eligible for less than 100% in grant funds), Owners must provide a statement that they can secure the balance of funds and will ensure that the balance of funds comes from a source eligible to supplement this grant. | | | |
| This is a reimbursement program; award recipients will be required to demonstrate payment for the project before receiving awarded funds. | | | |
| Project <u>must be completed</u> and paperwork submitted no later than August 31, 2021. DEEP cannot guarantee reimbursement payments for submissions after that date. | | | |
| <i>I hereby affirm, under penalty of law, that the information provided here is true and correct to the best of my knowledge. I further affirm that I have read, understand, and agree to all of the terms and conditions stated above. I understand that if it is determined that any funds were awarded to me as a result of false statements, I will be required to reimburse said funds to DEEP. I further understand that any false statement made in the submitted information may be punishable as a criminal offense under section 22a-175 of the Connecticut General Statutes, under section 53a-157b of the Connecticut General Statutes, and in accordance with any applicable statute.</i> | | | |
| Signature | | | |
| Typed Name | | | Date |



Part VII - Fleet Information Sheet

Part VII: Fleet Information:

List all vehicles or pieces of equipment that will be replaced, repowered, retrofitted or fitted with highway idle reduction technology for this proposed project. Use additional sheets if needed.

| Vehicle Class or Type of Equipment | Engine Make | Engine Model | Engine Model Year | Vehicle Identification Number (VIN) | Engine Serial Number | Engine Family Code | Horsepower | Cylinder Displacement | Current Fuel Type | Annual Fuel Usage | Annual Mileage/Operating Hours | Vehicle Annual Idling Hours | New Fuel Type | New Engine MPG or GPH | New Engine Idling Hours Reduced |
|------------------------------------|-------------|--------------|-------------------|-------------------------------------|----------------------|--------------------|------------|-----------------------|-------------------|-------------------|--------------------------------|-----------------------------|---------------|-----------------------|---------------------------------|
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- Enter all required information about existing fleet and new fleet.
- Complete this sheet if your application is for **Repower or Replacement** of onroad vehicles, nonroad equipment, commercial marine or locomotives.



Forms & Submission

- Deadline will be listed on application form
- Application & Information will be posted at https://www.ct.gov/deep/cwp/view.asp?a=2684&q=322100&deepNav_GID=1619
- Submit package via e-mail to: DEEP.MobileSources@ct.gov with the subject “2020 DERA Grant Application”



Post-Award Information



Post-Award Information

- Award amounts may be less than originally requested based on number of applications received and funds available.
- Applicant can accept or deny the award if awarded amount does not satisfy proposed project.
- Projects and final documentation must be completed by **August 31, 2021** to be eligible for reimbursement.
- Quarterly progress reports are required to be submitted.
- Awardee required to demonstrate payment for the project and submit required documentation before receiving awarded funds.



Post-Award Information, cont'd

- Render any replaced vehicle or engine inoperable
 - For Engine Replacement: cut a 3-inch hole in the engine block
 - For Vehicle Replacement: In addition to above, disable the chassis by cutting the vehicle's frame rails completely in half
- Keep new equipment in operation for a minimum of 3 years or replace with equal or better.
- If EV infrastructure installed with electric replacement or repower, and it's publicly accessible, then must comply with CGS.



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- Lottery Selection
- At least one from each state
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- Application & Information at <https://www.epa.gov/cleandiesel>





“The Lightning Round”

Answers to Common Questions



Answers to Common Questions

- Our goal is to announce award decisions within 45 days of the application deadline.
- This is a competitive grant program. Emission reductions are one part of the criteria that applications will be ranked against. Please see application form for list of preferential criteria.
- There are no targets for \$/ton pollutant reduced but cost effectiveness is also an evaluation criteria
- Partial awards may be issued and maximum funding is not guaranteed
- Projects initiated prior to filing an application for the program are not eligible for funding.



Answers to Common Questions

- If an awardee decides to cancel a project, notification must be sent to DEEP as soon as possible so that the funds can be made available to other applicants within a timeframe sufficient to allow completion of the substitute project(s).
- There are no limits on the amount of funding any one project or individual entity can receive; a grantee receiving DERA funds in one year is eligible to apply again in the subsequent year.
- For review consistency, DEEP has chosen to use EPA's Diesel Emissions Quantifier (DEQ) to calculate emissions benefits.



Questions?

- We will now answer general questions about the grant program.
- We may not get to every question or have an answer to every question during the webinar.
- If you have questions relating to a specific project or piece of equipment, please email the question to:
deep.mobilesources@ct.gov



Contact Us

E-Mail: Patrice.Kelly@ct.gov

E-Mail: deep.mobilesources@ct.gov

